

CAB-O-SIL® DIVISION

**CABOT**

**CABOT CORPORATION**

P. O. BOX 188, TUSCOLA, ILLINOIS 61953

TELEPHONE AREA CODE 217  
TUSCOLA 253-3370  
TELEX TUSCOLA 910-683-2542

**RECEIVED**

APR 15 1975

ENVIRONMENTAL PROTECTION AGENCY  
DIV. OF WATER POLLUTION CONTROL  
PERMIT SECTION - SPRINGFIELD  
STATE OF ILLINOIS

April 14, 1975

Mr. William H. Busch  
Manager, Permit Section  
Division of Water Pollution Control  
Illinois Environmental Protection Agency  
Springfield, ILL 62706


Dear Mr. Busch,

Cabot Corporation - Proposed Second Disposal Well  
Log #14-75

As agreed upon in the meeting held in Urbana on April 3, 1975, I am enclosing a new schematic of the proposed well which shows the double casing extended through the Silurian formation. We hope this information plus the meeting completes your requirements for consideration of the issuance of the permit.

Very truly yours,

CABOT CORPORATION

  
Michael G. Fowler  
Manufacturing & Plant Mgr.

ir

CC: CBBeck/DJRobinson  
RB Roaper  
JF Lemna

EPA Region 5 Records Ctr.



298934

## CABOT TUSCOLA DEEP DISPOSAL WELL NO. 2

### RECOMMENDED DRILLING AND COMPLETION PROCEDURE

#### A. General Outline

Drill 15" hole from surface to 225'.

Run 13-3/8" casing and circulate cement to surface.

Drill 12-1/4" hole from 225' to 3160', which should be 10-20' into the Maquoketa Shale. Stand back drill pipe and run DST tools on 2-7/8" tubing. Set packer above the Devonian section at approximately 2300' and swab well to obtain uncontaminated formation fluid sample from the Devonian and Silurian systems. Run logs. When verbal approval received,

Run 10-3/4" casing and circulate cement to surface.

x Drill 9-5/8" hole from 3160' to 5005'. Run logs.

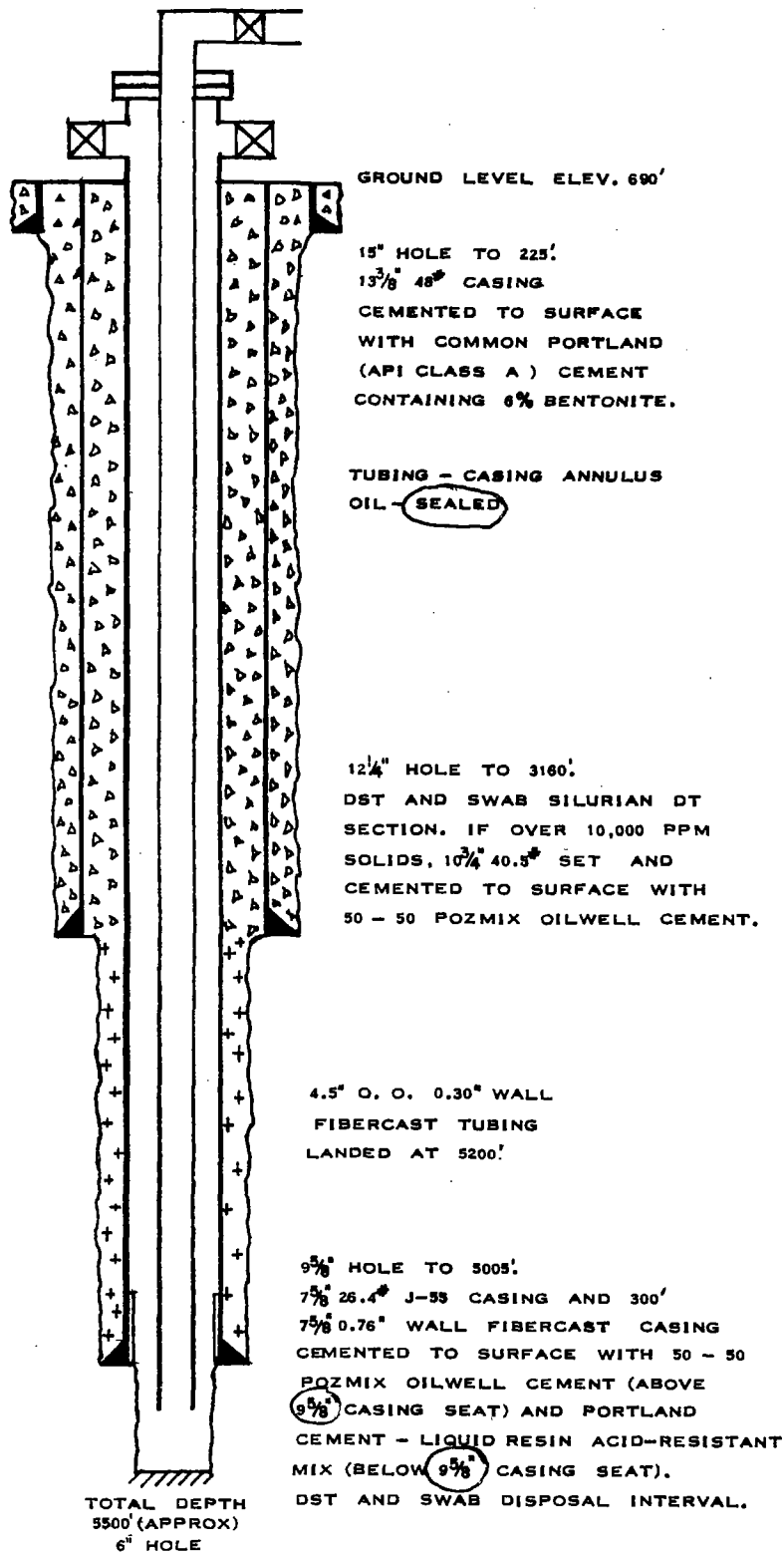
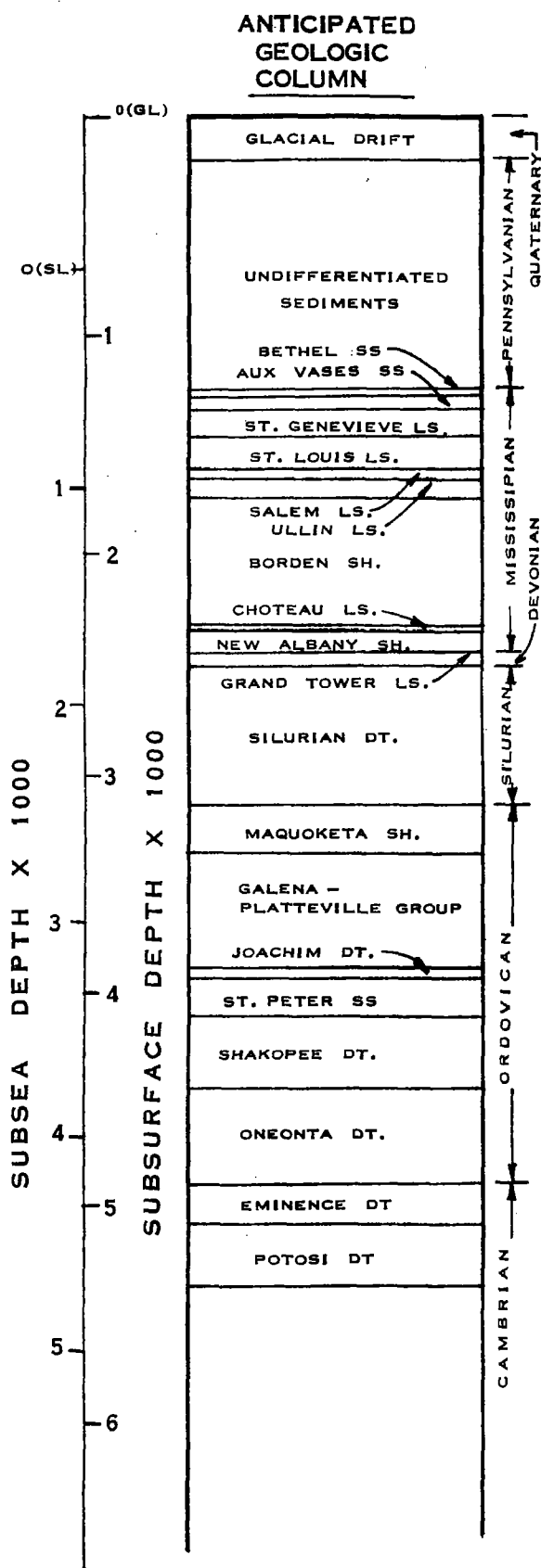
Run 7-5/8" casing, cement in two stages, and circulate to surface.

Drill 6" hole from 5005' to at least below 5320'. Drill to 5500' if possible. Lost circulation will probably be encountered below 5260', necessitating dry drilling below this depth. When TD is reached, stand back drill pipe and run casing packer on 2-7/8" tubing. Swab well to obtain uncontaminated (by drilling mud) formation fluid sample from the Potosi disposal interval. Run logs.

#### B. Detailed Requirements

1. Samples: Catch two sets of properly identified drill cuttings at 10' intervals from below surface casing to TD.
2. Logging program: 225' - 3610' Induction-electric (with SP curve)  
3610' - 5005' Induction-electric (with SP curve)  
5000' - TD Induction-electric (with GR curve) and gamma ray-caliper-sonic.
3. Swab tests: Collect three properly identified formation water samples from each of the intervals tested. Allow well to stand until static water level can be determined.
4. Bottom-hole pressure in the Potosi disposal interval will be obtained in conjunction with an injectivity test to be run after the tubing is in the well.

# PROPOSED NO 2 WELL COMPLETION



CABOT CORPORATION

PROPOSED COMPLETION AND GEOLOGIC COLUMN OF NO 2 DISPOSAL WELL